



The California Resources Agency  
**Department of Fish and Game**  
**Office of Spill Prevention and Response**



## **FREQUENTLY-ASKED QUESTIONS ABOUT OIL SPILLS**

**Q: How many gallons of oil are in a barrel?**

**A:** 42.

**Q: What should I do if I see oil in a place where it shouldn't be (a spill)?**

**A:** Report it, by telephoning (toll-free) 800-OILS-911. This is a good reporting number for the entire U.S. Pacific coast. Spills in marine waters should also be reported to the U.S. Coast Guard, by calling 800-424-8802.

**Q: How big is this spill compared to the 1989 *Exxon Valdez*, Alaska spill?**

**A:** The *Exxon Valdez* spilled nearly 11 million gallons (261,905 barrels) of crude oil. It carried 42 million gallons (1 million barrels), so could have been over three times worse than it was.

**Q: How do you know where the oil came from, if nobody confesses to spilling it?**

**A:** The OSPR Petroleum Chemistry Laboratory (near Sacramento) and the Coast Guard Marine Safety Laboratory (in Groton, Connecticut) use gas chromatography and mass spectrometry to produce a "fingerprint" of oil taken from wildlife or a spill. Oil samples may also be taken from vessels, pipelines or facilities that were in the area at the time of the spill. These are analyzed by experienced chemists in both labs, who independently compare the fingerprints. Matching or chemically consistent fingerprints mean we've found our responsible party.

**Q: What is the Unified Command System? Who has authority? Who investigates?**

**A:** In California, the Unified Command consists of the U.S. Coast Guard (the lead federal agency for marine spills) or the U.S. Environmental Protection Agency (lead federal agency for inland spills), California Dept. of Fish and Game Office of Spill Prevention and Response (OSPR), and the responsible party (the spiller). Their Incident Commanders work together to plan and direct the spill response, using the best available technology. In case of disagreements, the Coast Guard has overriding authority. Spill response professionals from all three entities work together in the Planning, Operations, Logistics and Finance Sections, and fill Command Staff positions at the incident command post.

Both the Coast Guard and OSPR investigate spills, and may assess fines and penalties according to state and federal laws and regulations. These investigations may lead to administrative penalties, or to civil and/or criminal charges.

**Q: How do local government agencies fit in?**

**A:** Local agencies form the Multi-Agency Committee (MAC), facilitated by the State Liaison Officer (in the Command Staff). S/he will take their concerns and offers of assistance to the Unified Command.

**Q: How much oil spill response equipment is available in California?**

**A:** As of April 2, 2004 there are 370,950 feet of boom and 375 people trained at a documented level of an operating specialty, with a minimum of 24-hour HAZWOPER training. The statewide oil recovery capacity is 539,885 barrels/day, de-rated. (*per CK, OSPR Marine Safety Branch*)

**Q: What is a "safe zone?"**

**A:** A "safe zone" is the area near, but outside the contaminated ("hot") zone, which is safe to occupy without any personal protective equipment (PPE). It may also be called the "cold zone." Clean-up support staff work in a safe zone. In cases where the Command Center is very close to the spill site, it will be located in a cold or safe zone.

**Q: What is NRDA?**

**A:** **N**atural **R**esources **D**amage **A**ssessment. NRDA investigators study the spill site, and assess the damage to the environment, wildlife, and/or cultural, social, or economic resources. They then determine what actions are needed to remediate the damage, and estimate the cost. This information may be considered when fines are levied against the responsible party.

**Q: Who takes care of injured animals?**

**A:** The Dept. of Fish and Game OSPR and California's Oiled Wildlife Care Network (OWCN) staff care for wildlife. OSPR's Veterinary Services unit includes experienced wildlife veterinarians and handlers with advanced training, who are responsible for the care of birds and animals injured by spills.

**Q: What is the Oiled Wildlife Care Network, or OWCN?**

**A:** The OWCN is a statewide network of 25 wildlife care organizations that consist of wildlife health professionals, care facilities, and trained volunteers. They collect the dead and capture, clean, and rehabilitate living oiled wildlife. When a spill occurs near an existing wildlife facility, such as the Marine Mammal Center, or a large aquarium, that facility's operators may assist and/or provide temporary shelter. The OWCN is funded by OSPR and operated by the University of California Davis Wildlife Health Center.

**Q: What process does the animal go through after capture?**

**A:** The bird or animal is handled very carefully, in an attempt to limit stress while being evaluated for its ability to survive, then it is stabilized. Oiled wildlife must be kept warm, as oil ruins the normal ability of fur and feathers to retain body heat. This makes the animal susceptible to hypothermia. If it is injured, it goes to medical triage. Once stabilized, it will be washed with warm water and an oil-dispersing detergent, dried, and held in captivity

until it is healthy enough to be released to the wild. Sick or injured victims are also provided veterinary care.

**Q: How successful is rehabilitation?**

**A:** That depends on several variables, such as the animal's species, physical condition prior to oiling, the time of year and weather conditions in which it was oiled, the length of time between initial contact with oil and the animal's capture, the type of oil, and whether there is an oiled wildlife care facility with trained veterinary staff nearby when it was captured.

In OSPR's experience, the survival rate of animals affected by marine oil spills that reach one of our facilities alive is, *on average*, about 30-50 percent. However, we constantly strive to improve both the survival rate and rehabilitation through research and communication with other professionals in the wildlife care field. Having a properly-equipped and staffed care facility near the spill increases survival rates. Because of this, the OWCN has such facilities in Santa Cruz, Humboldt, Solano, Los Angeles, and San Diego Counties, and has agreements with facilities and vets in other areas to be on-call, in case of spills.

**Q: What type of training is required for a person to work with the animals?**

**A:** Graduation from an accredited school of veterinary medicine, with a specialty in wildlife care is preferable, but not always necessary. OSPR's wildlife veterinarians direct the activities of trained animal health technicians and animal handlers, as well as DFG wildlife professionals and some non-professionals for the capture, care, and cleaning of oiled wildlife.

**Q: Can people volunteer to help?**

**A:** Yes, but in most cases, those without HAZWOPER and spill-response training cannot participate in actual clean-up or wildlife rescue activities. However, citizens who wish to assist as volunteers may call OSPR's toll-free phone number to get more detailed information. At some incidents, we have given four-hour Hazard Communications training to volunteers, who are then allowed to work in the wildlife care center. There is often a need for clerical and messenger-type assistance in the Command Post, too. The volunteer hot-line number is 800-228-7544.

**Q: What are dispersants? How do they work?**

**A:** Dispersants are chemicals that cause the spilled oil to break into smaller components, which sink down into the water column, where, microorganisms can eventually break it down, over time. This won't remove the oil from the water, but moves much of it from the water's *surface*, where seabirds usually get into it and suffer the consequences. Unfortunately, pushing oil into the water column makes it impossible to clean-up, mechanically.

**Q: What is in-situ burning? Have you ever done it?**

**A:** "In-situ" is Latin for "in-place," so in-situ burning means burning something in place — where it *is*. In some cases, this may be the most effective way to remove oil from the environment and protect sensitive ecosystems, but — like all response methods — it has

drawbacks. Burning oil creates a noxious plume of smoke and airborne particulate matter, so this method of removing oil from water would only be considered in an area and under weather conditions in which the smoke would not affect human populations — far offshore, for example, with *only offshore* winds.

To date, in-situ burning has never been used in California for oil spill response, and there are many limitations on the possibility that it could ever be used here. For a burn to work, the oil must be a certain thickness on the water to even ignite, and it must be ignited within a few hours of being spilled, before the high-end, volatile chemicals evaporate. Not all oil is even burnable. Specialized equipment must be readily available, and weather and oceanographic conditions must be favorable. In California, a predetermined approval process is required before a Unified Command can choose to burn spilled oil. This process involves numerous State and Federal agencies, officials, and local Air Quality Management District(s).

**Q: Can you use biological agents? What are they, and how do they work?**

**A:** Fertilizers and microorganisms are often used to treat oil spills. Both assist in the microbial breakdown of oil products in the water. Their efficacy depends on conditions.

**Q: What about public health?**

**A:** The Safety Officer in the Incident Command System will set-up air monitoring equipment in a spill area, to identify inhalation hazards for spill responders. S/he will provide the data collected to the Unified Command and to the local (city or county) Public Health Department(s), which will determine whether the human population is endangered. That agency is responsible for alerting the public through the media, other public agencies, by posting signs on beaches and coastal access sites, and/or other means. People may smell spilled petroleum product, even when there is no threat to public health. Some may experience headaches and/or nausea, as well. If such discomfort becomes unbearable, the affected person should consult his/her personal physician.

**Q: Who would handle an evacuation of the community?**

**A:** This is extremely rare; however, the local Office of Emergency Services (OES) would handle the evacuation of communities threatened during a spill. If the OES decides there is a risk to public health, they will tell local radio and television stations to notify the public via the Emergency Broadcast System. Local law enforcement personnel would direct the evacuation, and possibly make public address announcements from vehicles being driven through the affected area.

**Q: What should people do if they think they've been exposed to toxins?**

**A:** Contact your local Public Health Department, and then get medical attention from your personal physician, just as you would for any illness or injury. Anyone without a personal physician will be advised on further action by the health department staff.

**Q: How is OSPR funded?**

**A:** OSPR has two funding sources. The ongoing spill prevention, preparedness and administrative activities are funded by a 5-cent-per-barrel fee on oil. The second is the State Oil Spill Response Trust Fund, which can only be used for oil spill response and the restoration of natural resources injured by the spill. This guarantees immediate response to and clean-up of spills in California's waters. The spill response fund was created by a 25-cent-per-barrel fee on all crude oil transported through California's marine waters, in 1991. Within a few months, the account reached \$50 million, and was discontinued. The above-mentioned *five-cents-per-barrel* fee then replaced it. Any time money from the Oil Spill Response Trust Fund is used, the responsible party (RP) must reimburse the account. Interest earned by the \$50 million fund supports the Oiled Wildlife Care Network.

**Q: What if you can't find a "Responsible Party?"**

**A:** In the case of a "mystery spill" — where the spiller can't be identified, located, or is insolvent — a rapid response will be funded by either the State or Federal Oil Spill Response Trust Fund. In many cases, the State fund can be reimbursed by the federal fund. If not, and the amount is significant, a mechanism will be activated for the oil industry to replenish the account. Since the Oil Spill Prevention and Response Act of 1990 was enacted, the account has never had to be replenished with a higher fee. This arrangement has never caused consumers to "feel it at the pump."

**Q: Who can access the State Oil Spill Response Fund?**

**A:** The OSPR Administrator (who is appointed by the Governor) has full access to the funds, and is given power to spend them for spill clean-up and remediation, as s/he sees fit. The Administrator is advised by OSPR's professional staff, and works closely with numerous Federal, State, and local agencies to make such determinations.

**Q: Where can I get more information about California spills?**

**A:** Visit the DFG-OSPR website at [www.dfg.ca.gov/ospr](http://www.dfg.ca.gov/ospr). In addition to our own information, the site offers many links to other sites with information about oil spills, prevention, and response.

